

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(Pursuant to NAC 445A.236)

Permittee Name: Tahoe Ridge Winery & Marketplace, L.L.C.
P. O. Box 2636
Minden, NV 89423

Permit Number: NEV2004525

Location: Tahoe Ridge Winery & Marketplace
1974 Foothill Road
Minden, Douglas County, Nevada
Latitude: 38° 58.47'N
Longitude: 119° 3250.337'W
Township 13N, Range 19E, Section 22

General:

The Tahoe Ridge Winery & Marketplace, L.L.C., plans to construct and operate a commercial gourmet foods facility at the site of the historic Van Sickle Station Ranch, near Minden, Nevada. At build-out, the facility will include a commercial winery, creamery, and brewery, along with a culinary school, business offices and guest accommodations. Tahoe Ridge Winery and Marketplace proposes the on-site treatment of wastewaters associated with the culinary school, offices and guest housing in a commercial “denitrifying septic system”. Wastewaters associated with industrial activities at the winery will be addressed under a separate permit (NEV2004351). Domestic wastewater associated with the future creamery and brewery are within the scope of the permits.

Tahoe Ridge Winery proposes the phased construction of two parallel 4,500 gallons per day denitrifying septic system trains, Treatment Train 1 and 2, for a total build-out capacity of 9,000 gallons per day. The Permittee proposed the use of MicroFast® 4.5 X treatment units in the construction. Each treatment train will consist of a 3000 gallon settling tank, followed by a 5000 gallon denitrifying tank. Effluent from each train will discharge to a common lift station, from which it will be pumped to dual leach fields. Flow to the leach fields shall be measured at the lift station, and required samples for chemical analyses of the system effluent will be taken at this point. Initially the leach fields will each have 833 linear feet of leach line. The second phase of construction shall increase the size of each leach field to 1667 linear feet.

Product information regarding the MicroFast® 4.5 X treatment units describe the treatment method as “fixed activated sludge”. Nevada Administrative Code (NAC) 445A.289 classifies this system as a Class III plant, and NAC 445A.290 requires that the system be operated by a Grade III operator.

During those time periods in which the winery process water cannot be applied to fields for agricultural purposes due to frozen, flooded or saturated ground, the Permittee may route winery process water to the permitted denitrifying septic system, provided that only water used for general cleaning is routed to the septic system. This process stream will be monitored prior to introduction

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to the denitrifying septic system, and will be limited to a 30-day average daily flow of 1000 gallons per day. Because industrial effluent will be introduced to the treatment system may contain copper and copper sulfate used to treat sulfides in the wine, monitoring wells upgradient and down gradient of the leach fields are required.

Flow: Total Flow at Build Out: 0.009 MGD Daily Maximum
Treatment Train 1: 0.0045 MGD Daily Maximum
(including flow from Winery Process Area when necessary)
0.002 MGD 30-Day Average
Flow from Winery Process Area 0.001 MGD 30-Day Average

Receiving Water Characteristics:

Receiving water at this site is groundwater, which is reportedly encountered at approximately 20 feet below surface in the area of the proposed leach fields. Baseline information on the ambient groundwater quality is not known at this time, but will be monitored prior to operation of the system as a condition of the Schedule of Compliance.

Proposed Effluent and Groundwater Limitations:

The monitoring wells to be installed up gradient and down gradient of the leach fields shall be limited and monitored according to the Table below:

<u>PARAMETERS</u>	<u>GROUNDWATER R LIMITATIONS</u>	<u>MONITORING REQUIREMENTS</u>	
		Measurement Frequency	Sample Type
Depth to Water, ft	Monitor and Report	Quarterly	Discrete
Groundwater Elevation, ft AMSL	Monitor and Report	Quarterly	Discrete
Total Nitrogen as N, mg/l	10	Quarterly	Discrete
Nitrate as N, mg/l	Monitor and Report	Quarterly	Discrete
Total Dissolved Solids, mg/l	Monitor and Report	Quarterly	Discrete
Chloride, mg/l	Monitor and Report	Quarterly	Discrete
Copper, mg/l	Monitor and Report	Quarterly	Discrete

The flow from the winemaking area and the influent and effluent from the treatment system will

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be limited and monitored according to the Table below:

PARAMETERS		EFFLUENT DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
		30 Day Ave.	Daily Max.	Measurement Frequency	Sample Type
Total Flow at Build Out , MGD		---	0.009	Continuous	Flow Meter
Flow, MGD	Treatment Train 1	---	0.0045	Continuous	Flow Meters
	Wine Process Area	0.001	---		
BOD ₅ mg/l	Treatment Train 1 Influent Effluent	M & R 30	M & R 45	Monthly	Discrete
	Wine Process Area	M & R			
Total Suspended Solids mg/l	Treatment Train 1 Influent Effluent	M & R 30	M & R 45	Monthly	Discrete
	Wine Process Area	M & R			
Total Nitrogen mg/l	Treatment Train 1	15	45	Monthly	Discrete
	Wine Process Area	M & R			
Nitrate as N mg/l	Treatment Train 1	M & R		Monthly	Discrete
	Wine Process Area	M & R			
Ammonia as N mg/l	Treatment Train 1	M & R		Monthly	Discrete
	Wine Process Area	M & R			
Copper mg/l	Treatment Train 1	1.3		Monthly	Discrete
	Wine Process Area	M & R			

M & R = Monitor and Report

Schedule of Compliance

The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications that the Administrator may make in approving the schedule of compliance.

- a. **Prior to operation of the system**, the Permittee shall submit a plan for appropriately sited monitor wells up gradient and down gradient of the leach field for NDEP review and approval. These plans must include proposed well locations and well design(s), wet stamped

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by a Nevada registered professional engineer. Please refer to NDEP Water Technical Sheet WTS-4, "Guidance Document For Design Of Groundwater Monitoring Wells".

- b. **Prior to operation of the system**, the Permittee shall construct and complete the approved monitor wells. Upon completion, documentation certifying construction and completion, as well as well logs and a map giving actual well locations, shall be submitted to NDEP.
- c. **Prior to operation of the system**, the Permittee shall sample all monitor wells every two weeks for a period of eight (8) weeks, to establish baseline water quality data. The samples shall be analyzed by a Nevada certified laboratory for the following constituents: BOD₅, TDS, and constituents listed in the attached Profile I suite of analytes.
- d. **Prior to operation of the system**, the Permittee shall install the required pump timers (hour meters) and sampling port, and shall provide documentation verifying installation to NDEP.
- e. **Within 30 days of issuance by Douglas County of first Notice of Occupancy**, the Permittee shall provide as-built drawings, stamped by a Nevada registered professional engineer, of the facility.

Special Conditions

During months in which the winery process water cannot be applied to fields for agricultural purposes, or due to frozen, saturated or flooded soil conditions, the Permittee may route winery process water to the permitted denitrifying septic system, provided that only water used for general cleaning is routed to the septic system. High strength (BOD₅ and TSS of over 350 and 400 mg/l, respectively, Wastewater Engineering, 4th Edition, Metcalf and Eddy, page 186) wastewaters that are part of the winemaking process, including, but not limited to, grape juice, rejected wines, cask dregs, etc., may not be routed to the permitted septic system.

The proposed system utilizes the treatment of domestic wastewater by the activated sludge method. NAC 445A.289 and 290 require that the proposed system be operated by a certified Grade III operator.

Proposed Determination

The Division has made the tentative determination to issue the proposed permit for a period of five (5) years.

Rationale for Permit Requirements

The flow is measured to verify the flow to the treatment plant is consistent with permit limitations, and to determine when design capacity is being approached. Effluent BOD₅, TSS, Total Nitrogen are monitored to verify compliance with permit limitations. Nitrate and Ammonia as N are monitored to assess effectiveness of the denitrification process. Copper is monitored and limited to 1.3 mg/l ("National Recommended Water Quality Criteria for Priority Toxic Pollutants", EPA, November 2002) because of potential degradation due to the inclusion of the industrial wastewater component that includes copper containing compounds.

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Groundwater monitoring is required to verify that groundwater of the State is not degraded.

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Nevada Appeal** and the **Record-Courier** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit may do so in writing for a period of 30 days following the date of the public notice. All comments regarding this permit must be received or postmarked by **5:00 PM on November 4, 2005**. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Prepared by: Janine O. Hartley
Staff Engineer II
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